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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/599,653

Applicant(s)

OOMURA, HIROSHI

Examiner

Nicholas C. Pachol

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 12-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date 10/04/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

2. Claim 22 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 22 claims "A computer-readable storage medium storing the computer program of claim 21. According to claim 21, the computer program is stored in a computer-readable storage medium. Therefore, claim 22 claims a storage medium which is already claimed in claim 21. Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 21 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 21 claims "A computer program ..." However, the claims do not define a program to be a functional descriptive material encoded on a memory/disk/computer-

readable medium, and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized"). Moreover, a "program" is neither a process ("action"), nor machine, nor manufacture, nor composition of matter (i.e., tangible "thing") and therefore non-statutory.

Such claimed "program" (software) does not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. As such, "program"/software, not claimed as embodied/encoded in computer-readable medium and is not statutory because the "program"/software is not capable of causing functional change in the computer. Because the full scope of the claim as properly read in light of the disclosure encompasses non-statutory subject matter, the claim as a whole is non-statutory and appears to be one type of claim that is considered nonstatutory, under the present USPTO Interim Guidelines, 1300 Official Gazette Patent and Trademark Office 142 (Nov. 22, 2005).

Claim 22 is rejected because of its dependency off of claim 21.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 12-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 2002/0156947) in view of Kimber (US 5,903,716).

Regarding Claim 12, Nishio teaches a network device management apparatus which has network connection means and manages a network device which is connected to a network (Page 1, paragraph 2), said device having a plurality of functions, comprising:

storage means for storing a network address of at least one network device that does not support any network-compatible Plug and Play function, and function information associated with a plurality of functions of the network device (Page 8, paragraphs 111 and 113).

Nishio does not teach response means for, when a location confirmation request of a network-compatible Plug and Play device is received via the network connection means, generating and returning a message including identification information which specifies the network device that does not support the network-compatible Plug and Play function as a plurality of independent virtual network-compatible Plug and Play devices corresponding to the functions indicated by the plurality of pieces of function information stored in said storage means,

wherein the identification information identifying the plurality of independent virtual network-compatible Plug and Play devices is used for installing a plurality of

device drivers corresponding to the plurality of independent virtual network-compatible Plug and Play devices.

Kimber does teach response means for, when a location confirmation request of a network-compatible Plug and Play device is received via the network connection means, generating and returning a message including identification information which specifies the network device that does not support the network-compatible Plug and Play function as a plurality of independent virtual network-compatible Plug and Play devices corresponding to the functions indicated by the plurality of pieces of function information stored in said storage means (Column 3, lines 38-45 and Column 4, lines 8-16),

wherein the identification information identifying the plurality of independent virtual network-compatible Plug and Play devices is used for installing a plurality of device drivers corresponding to the plurality of independent virtual network-compatible Plug and Play devices (Column 3, lines 38-45 and Column 4, lines 8-16).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Regarding Claim 13, Nishio further teaches wherein the function information stored in said storage means includes protocol information required to communicate with a network device to be stored (Page 4, paragraph 66).

Regarding Claim 14, Nishio further teaches control means for, when job information addressed to the virtual network-compatible Plug and Play device is received via the network connection means, acquiring an address and protocol information of the corresponding network device from said storage means, converting the job information into the acquired protocol, and transmitting the converted information to the acquired address (Page 4, paragraph 66).

Regarding Claim 15, Nishio does not teach wherein the functions indicated by the function information include functions of a plurality of different printer drivers that can generate print data which can be processed by the network device.

Kimber does teach wherein the functions indicated by the function information include functions of a plurality of different printer drivers that can generate print data which can be processed by the network device (Column 3, lines 38-45 and Column 4, lines 8-16).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber

for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Regarding Claim 16, Nishio further teaches search means for searching for a network device which does not support any network-compatible Plug and Play function (Page 8, paragraph 113);

registration means for registering in said storage means a network address of a network device found by said search means, and information for specifying a protocol used in a communication with the network device found by said search means (Page 8, paragraphs 113 and 114); and

generation means for generating a message to be returned by said response means in place of the registered network device (Page 8, paragraph 114).

Regarding Claim 17, Nishio further teaches wherein said search means determines, as a network device group that does not support any network-compatible Plug and Play function, a network device group which remains after excluding network devices detected as a search result of a UPnP network protocol from a network device group detected by a search of an SNMP protocol (Page 8, paragraph 111 and 113).

Regarding Claim 18, Nishio further teaches wherein the network device is a network printer (Page 2, paragraph 28).

Regarding Claim 19, Nishio does not teach wherein, when the network device supports a plurality of printer languages, said response means responds as a logically virtual network-compatible Plug and Play printer which is independent for each individual printer language.

Kimber does teach wherein, when the network device supports a plurality of printer languages, said response means responds as a logically virtual network-compatible Plug and Play printer which is independent for each individual printer language (Column 2, lines 50-60).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Regarding Claim 20, Nishio teaches a method of controlling a network device management apparatus which has network connection means (Page 1, paragraph 2), and storage means for storing a network address of at least one network device that does not support any network-compatible Plug and Play function (Page 8, paragraphs 111 and 113), and protocol information used to communicate with the network device, and manages a network device connected to a network (Page 2, paragraph 29).

Nishio does not teach generating and returning, when a location confirmation request of a network-compatible Plug and Play device is received via the network connection means, a message including identification information which specifies the network device that does not support the network-compatible Plug and Play function as a plurality of independent virtual network-compatible Plug and Play devices corresponding to the functions indicated by a plurality of pieces of function information stored in the storage means,

wherein the identification information identifying the plurality of independent virtual network-compatible Plug and Play devices is used for installing a plurality of device drivers corresponding to the plurality of independent virtual network-compatible Plug and Play devices.

Kimber does teach generating and returning, when a location confirmation request of a network-compatible Plug and Play device is received via the network connection means, a message including identification information which specifies the network device that does not support the network-compatible Plug and Play function as a plurality of independent virtual network-compatible Plug and Play devices corresponding to the functions indicated by a plurality of pieces of function information stored in the storage means (Column 3, lines 38-45 and Column 4, lines 8-16),

wherein the identification information identifying the plurality of independent virtual network-compatible Plug and Play devices is used for installing a plurality of device drivers corresponding to the plurality of independent virtual network-compatible Plug and Play devices (Column 3, lines 38-45 and Column 4, lines 8-16).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Regarding Claim 21, Nishio teaches a computer program, stored in a computer-readable storage medium, serving as a network device management apparatus which has network connection means (Page 1, paragraph 9), and storage means for storing a network address of at least one network device that does not support any network-compatible Plug and Play function (Page 8, paragraph 111 and 113), and protocol information used to communicate with the network device, and manages a network device connected to a network (Page 2, paragraph 29).

Nishio does not teach generating and returning, when a location confirmation request of a network-compatible Plug and Play device is received via the network connection means, a message including identification information which specifies the network device that does not support the network-compatible Plug and Play function as a plurality of independent virtual network-compatible Plug and Play devices corresponding to the functions indicated by a plurality of pieces of function information stored in the storage means,

wherein the identification information identifying the plurality of independent virtual network-compatible Plug and Play devices is used for installing a plurality of device drivers corresponding to the plurality of independent virtual network-compatible Plug and Play devices.

Kimber does teach generating and returning, when a location confirmation request of a network-compatible Plug and Play device is received via the network connection means, a message including identification information which specifies the network device that does not support the network-compatible Plug and Play function as a plurality of independent virtual network-compatible Plug and Play devices corresponding to the functions indicated by a plurality of pieces of function information stored in the storage means (Column 3, lines 38-45 and Column 4, lines 8-16),

wherein the identification information identifying the plurality of independent virtual network-compatible Plug and Play devices is used for installing a plurality of device drivers corresponding to the plurality of independent virtual network-compatible Plug and Play devices (Column 3, lines 38-45 and Column 4, lines 8-16).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Regarding Claim 22, Nishio teaches a computer-readable storage medium storing the computer program of claim 21 (Page 8, paragraph 120).

Regarding Claim 23, Nishio further teaches wherein the function information stored in the storage means includes protocol information required to communicate with a network device to be stored (Page 4, paragraph 66).

Regarding Claim 24, Nishio further teaches a control step of, when job information addressed to the virtual network-compatible Plug and Play device is received via the network connection means, acquiring an address and protocol information of the corresponding network device from said storage means, converting the job information into the acquired protocol, and transmitting the converted information to the acquired address (Page 4, paragraph 66).

Regarding Claim 25, Nishio does not teach wherein the functions indicated by the function information include functions of a plurality of different printer drivers that can generate print data which can be processed by the network device.

Kimber does teach wherein the functions indicated by the function information include functions of a plurality of different printer drivers that can generate print data which can be processed by the network device (Column 3, lines 38-45 and Column 4, lines 8-16).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Regarding Claim 26, Nishio further teaches a search step of searching for a network device which does not support any network-compatible Plug and Play function (Page 8, paragraph 113);

a registration step of registering in the storage means a network address of a network device found in said search step, and information for specifying a protocol used in a communication with the network device found in said search step (Page 8, paragraphs 113 and 114); and

a generation step of generating a message to be returned in said step of generating and returning in place of the registered network device (Page 8, paragraph 114).

Regarding Claim 27, Nishio further teaches wherein said search step includes determining, as a network device group that does not support any network-compatible Plug and Play function, a network device group which remains after excluding network

devices detected as a search result of a UPnP network protocol from a network device group detected by a search of an SNMP protocol (Page 8, paragraphs 111 and 113).

Regarding Claim 28, Nishio further teaches wherein the network device is a network printer (Page 3, paragraph 28).

Regarding Claim 29, Nishio does not teach wherein, when the network device supports a plurality of printer languages, said step of generating and returning includes responding as a logically virtual network-compatible Plug and Play printer which is independent for each individual printer language.

Kimber does teach wherein, when the network device supports a plurality of printer languages, said step of generating and returning includes responding as a logically virtual network-compatible Plug and Play printer which is independent for each individual printer language (Column 2, lines 50-60).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Regarding Claim 30, Nishio teaches a network device management apparatus which manages a network device connected to a network, the device having a plurality of functions (Page 1 ,paragraph 2), said apparatus comprising:

processing means for receiving and processing a request regarding the network device (Page 8, paragraphs 111 and 113).

Nishio does not teach response means for, when a request regarding the network device is received by said processing means, returning a plurality of identification data, each of the identification data corresponding to a respective one of the plurality of functions of the network device,

wherein the plurality of identification data to be returned by said response means is used for installing a plurality of device drivers corresponding to the plurality of functions of the network device.

Kimber does teach response means for, when a request regarding the network device is received by said processing means, returning a plurality of identification data, each of the identification data corresponding to a respective one of the plurality of functions of the network device (Column 3, lines 38-45 and Column 4, lines 8-16),

wherein the plurality of identification data to be returned by said response means is used for installing a plurality of device drivers corresponding to the plurality of functions of the network device (Column 3, lines 38-45 and Column 4, lines 8-16).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Regarding Claim 31, Nishio does not teach wherein the network device supports a plurality of printing languages, each of the plurality of identification data corresponding to a respective one of the plurality of printing languages.

Kimber does teach wherein the network device supports a plurality of printing languages, each of the plurality of identification data corresponding to a respective one of the plurality of printing languages (Column 2, lines 50-60).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Regarding Claim 32, Nishio teaches a method for controlling a network device management apparatus which manages a network device connected to a network, the device having a plurality of functions (Page 1, paragraph 2).

Nishio does not teach a response step of, when a request with regarding to the network device is received, returning a plurality of identification data, each of the identification data corresponding to a respective one of the plurality of functions of the network device,

wherein the plurality of identification data to be returned in said response step is used for installing a plurality of device drivers corresponding to the plurality of functions of the network device.

Kimber does teach a response step of, when a request with regarding to the network device is received, returning a plurality of identification data, each of the identification data corresponding to a respective one of the plurality of functions of the network device (Column 3, lines 38-45 and Column 4, lines 8-16),

wherein the plurality of identification data to be returned in said response step is used for installing a plurality of device drivers corresponding to the plurality of functions of the network device (Column 3, lines 38-45 and Column 4, lines 8-16).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Regarding Claim 33, Nishio does not teach wherein the network device supports a plurality of printing languages, each of the plurality of identification data corresponding to a respective one of the plurality of printing languages.

Kimber does teach wherein the network device supports a plurality of printing languages, each of the plurality of identification data corresponding to a respective one of the plurality of printing languages (Column 2, lines 50-60).

Nishio and Kimber are combinable because they both teach accessing a printer across a network.

Therefore it would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Nishio with the teachings of Kimber for the purpose of operating a single printer in accordance with a plurality of default configurations (Kimber: Column 2, lines 5-14).

Regarding Claim 34, Nishio teaches a computer-readable storage medium storing a computer program for causing a computer to perform the steps of the method of claim 32 (Page 8, paragraph 120).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas C. Pachol whose telephone number is 571-270-3433. The examiner can normally be reached on M-Thr, 8:00 a.m.- 4:00 p.m. (EST), Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

N.P.
04/23/09

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625